CHAPTER IX: INTRODUCTION

DR. CHESNEY: Good morning. I'm Margaret Chesney, the Deputy Director of the National Center for Complementary and Alternative Medicine. And, I want to welcome you to the second NCCAM Distinguished Lecture for 2006. This lecture series was introduced by NCCAM in 2002 and there are two lectors each year, addressing complementary, alternative, and integrated medicine from various perspectives – practice, history, research, and policy.

Dr. Steven Straus, our Director, who is here today, was kind enough to ask me to introduce today's speaker, Dr. Ram Sasisekharan, who will speak to us about natural products.

Now, as many of you know, natural products, herbal therapies, food supplements, are among the most frequently used complementary and integrative medicine therapies in the United States and, actually, around the world. NCCAM is supporting basic and clinical research that focuses on these products, investigating which are safe, which are effective, and, for those that have health enhancing effects, into mechanisms to see how it might be that these products may work and have their effects on our health, in both prevention and treatment.

This brings us to Dr. Sasisekharan's lecture today. After receiving a bachelor's degree in physical sciences from Bangalore University in Bangalore, India, Dr. Sasisekharan received his master's degree in biophysics, and a PhD in medical sciences from Harvard Medical School. He's currently professor of biological engineering at Massachusetts Institute of Technology.

I could tell you much more about Dr. Sasisekharan's background of his over 100 scientific publications. The fact that he has five grants from NIH in the last three years. But, you didn't come to hear me. So, I'd like to turn the podium over to Dr. Sasisekharan, who will share insights on the challenges sciences face when researching natural products in an increasingly technocentric health care environment. And, the potential that his research has to be improve human health outcomes. So, please join me in welcoming Dr. Ram Sasisekharan as he presents Natural Products – Challenges and Opportunities.

DR. SASISEKHARAN: Ladies and gentleman, Dr. Straus, first of all, I'd like to thank you for inviting me to present at this Distinguished Lecture Series. It's truly an honor and a privilege to be able to do that.

I also want to acknowledge my longstanding support from the National Institute of General Medical Sciences, which has been key for funding the research programs that I'll be talking about, and for me to be on this podium today.

As the title suggests, what I'm going to do today is to talk about a specific example of natural product, in terms of a class of molecules that truly have revolutionized modern biological sciences in a certain way. But, I want to talk about that in terms of both the challenges that it presented, historically, more specifically, in terms of some of the scientific underpinnings, if you will, and how those challenges, in many ways, translated into opportunities, from my perspective. And, really share with you a series of, you know, examples, through a series of examples, to illustrate some of the key points.